Massachusetts Department of Public Health
Bureau of Communicable Disease Control and The Center for Emergency Preparedness

Influenza Pandemic Planning
A High Priority

Potential Impact of an Influenza Pandemic

An influenza pandemic occurs when a novel and highly contagious strain of the influenza virus emerges, affecting populations around the world. Three influenza pandemics occurred in the Twentieth Century (1918, 1957, 1968). In 1918, more than 500,000 Americans died from influenza.

Many experts consider influenza pandemics to be inevitable... yet no one knows when the next one will occur.

The impact of the next pandemic could have a devastating effect on the health and well being of the American public. In Massachusetts alone, over the course of 6 – 8 weeks:

- 2 million people may become ill
- 80,000 people may require hospitalization
- 20,000 people may die

(Source: CDC FluSurge)

Collaboration between the public health and emergency response sectors will result in Massachusetts being better prepared for the next pandemic. Many of the current activities related to emergency preparedness (e.g., communication strategies) will prove invaluable in responding to any infectious disease emergency.

5 Reasons to Prepare for a Pandemic

An influenza pandemic presents challenges unlike those of any other public health emergency or community disaster.

1. Simultaneous outbreaks are expected to occur throughout the U.S. and the world, preventing the shifts in human and material resources that provide assistance during other disasters. The effect of influenza on communities will be prolonged - weeks to months - when compared to other disasters.
2. Vaccines, antiviral agents and antibiotics will be in short supply. Vaccine for the pandemic influenza strain will not be available for 4 - 6 months. Everyone may need 2 doses of vaccine for immunity.
3. Medical facilities will be quickly overwhelmed, requiring the use of non-traditional medical settings and personnel.
4. Health-care workers and other first responders may be at higher risk of exposure and illness than the general population, further impeding the care of the sick.
5. Widespread illness may result in sudden and significant shortages of personnel who provide critical community services (e.g., fire fighters, police, utility and transportation workers, teachers and childcare providers).

For more information, visit the MDPH Influenza Website at www.mass/gov/dph/flu, or call the Massachusetts Department of Public Health at 617-983-6800.

Additional information, including pandemic preparedness checklists, is available at the U.S. Department of health Human Services website at: www.pandemicflu.gov.

Pandemic Planning in Massachusetts

1. Planning

In Massachusetts, the Department of Public Health is the lead agency for pandemic preparedness and response. An Executive Pandemic Planning Committee will make recommendations regarding critical decisions and ensure a coordinated statewide response to the next pandemic.

The State/Local Pandemic Planning Committee is a forum through which local public health and other entities provide feedback to MDPH on vaccine distribution and communication issues. Public participation in pandemic planning is being solicited to elicit input and build support for final decisions.

2. Continuity of Operation Plans

An influenza pandemic will affect all sectors at all levels. Agencies and organizations should have plans in place to ensure maintenance of essential services during periods of high absenteeism. Agencies should plan for the worst-case scenario, in which up to 40% of the workforce is absent for a two week period, due to illness or to care for family members.

3. Surveillance

Surveillance during a pandemic is based on the existing influenza surveillance system, which includes syndromic surveillance for respiratory illness, year-round monitoring of influenza-like illness at sentinel surveillance sites around the state, reports of laboratory tests and laboratory testing to confirm type and subtype influenza virus strains.

4. Enhanced Surge Capacity

Contingency plans to address gaps in the existing health-care infrastructure and plans to provide food, medical and other essential services for persons confined to their homes by choice, by direction or due to illness are being developed. MDPH is working w/ health care providers statewide on this planning effort.

5. Use of Antiviral Medications

Antivirals may be used for prophylaxis and/or treatment of influenza. However, they are expensive, have side effects and will be in short supply during a pandemic. Antiviral medications must be used carefully to decrease the likelihood of the development of antiviral-resistant strains of the influenza virus. In a pandemic, antivirals will most likely be used for treatment and the point of distribution will be health care facilities.

6. Vaccine Distribution

Vaccine will not be available early in a pandemic. Once available, Massachusetts can expect to receive shipments of vaccine on a monthly basis. Initial doses of vaccine will be prioritized to health care workers and persons most at risk for complications from influenza.

During a pandemic, MDPH will utilize the existing MDPH vaccine distribution system, with support from the MDPH Strategic National Stockpile, to distribute vaccine. MDPH has worked w/ local public health officials statewide to identify emergency dispensing sites for public health emergencies. Municipalities are responsible for administering vaccine to residents in their jurisdiction and should have plans in place for the vaccination of large numbers of people on short notice.

7. Increase Influenza and Pneumococcal Vaccine Coverage Now

Ensuring annual influenza vaccination of everyone at risk for complications from influenza will improve the infrastructure for vaccine delivery and decrease the annual toll of influenza. Ensuring pneumococcal vaccination of everyone at risk for pneumococcal disease now will reduce some of the bacterial complications of influenza now and during the next pandemic.